ABSTRACT

An amplifier configured by including Doherty-type amplifier sections (21 to 25), the area of the circuits is reduced so that size reduction of the amplifier is achieved. The properties of the Doherty-type amplifier sections are stabilized against any environmental changes in humidity and temperature. The permittivity of a substrate (3) forming one or more of quarter wavelength lines (23 and/or 24) included in the Doherty-type amplifier sections (21 to 25) is increased in comparison with the permittivity of an adjacent substrate (2). Also, a line portion forming an output circuit of a carrier amplifier in the Doherty-type amplifier sections is constructed using a substrate material that is physically stable against changes in humidity and temperature.